


CLAIMS

5 1. A method for stimulating liver regeneration in a subject having a liver disorder comprising administering of bone marrow cells to said subject in an amount sufficient to result in the production of hepatocytes, bile ductal cells and/or oval cells.

2. The method of Claim 1 wherein the bone marrow cells are injected.

3. The method of Claim 1 wherein the bone marrow cells are transplanted into the liver.


10  4. The method of Claim 1 wherein the bone marrow cells are genetically engineered to express a functionally active protein.

5. The method of Claim 1 wherein the bone marrow cells are on a support matrix.

15 ~~6.~~ 6. A method for stimulating liver regeneration in a subject having a liver disorder comprising the administration of enriched oval cells to a subject in an amount sufficient to result in the production of hepatocytes, bile ductal cells and/or oval cells.

7. The method of Claim 6 wherein the oval cells are injected.

20 8. The method of Claim 6 wherein the oval cells are transplanted into the liver.

 9. The method of Claim 6 wherein the oval cells are genetically engineered to express a functionally active protein.

10. The method of Claim 6 wherein the oval cells are on a support matrix.
11. The method of Claim 1 or 6 wherein the dose of cells is between 10^5 - 10^6 .
- 5 12. The method of Claim 1 or 6 wherein the dose of cells is between 10^6 - 10^8 .
13. The method of Claim 1 wherein the bone marrow cells are contacted with a growth factor prior to administration.
14. The method of Claim 6 wherein the oval cells are contacted with a growth factor prior to administration.
15. A method for stimulating pancreatic regeneration in a subject having a pancreatic disorder comprising administering of bone marrow cells to said subject in an amount sufficient to result in the production of pancreatic cells.
16. The method of Claim 15 wherein the bone marrow cells are injected.
17. The method of Claim 15 wherein the bone marrow cells are transplanted into the pancreas.
18. The method of Claim 15 wherein the bone marrow cells are genetically engineered to express a functionally active protein.
19. The method of Claim 15 wherein the bone marrow cells are on a support matrix.

20. A method for enriching for oval cells comprising:
- (a) disaggregating liver tissue to form a single cell suspension of hepatic cells;
 - (b) purification from the single cell suspension of Thy1.1 positive hepatic cells from Thy1.1 negative hepatic cells;
- wherein the Thy1.1 positive cells comprise the oval cells.
21. The method of Claim 20 wherein Thy1.1 positive hepatic cells are purified from Thy1.1 negative cells using a Thy-1 specific antibody.
22. A composition comprising an enriched population of oval cells in a physiologically acceptable carrier.
23. A composition of matter comprising an enriched population of oval cells attached to a matrix.
24. The composition of matter of Claim 23 further comprising a growth factor associated with the matrix.